### DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials

Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

## WELDING INSPECTION REPORT

Resident Engineer: Siegenthaler, Peter **Report No:** WIR-018200

Address: 333 Burma Road **Date Inspected:** 17-Nov-2010

City: Oakland, CA 94607

**Project Name:** SAS Superstructure **OSM Arrival Time:** 645 **OSM Departure Time:** 1845 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

**CWI Name: CWI Present:** Yes An Qing Xiang. No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No Weld Procedures Followed: Yes No N/A **Qualified Welders:** Yes No N/A **Verified Joint Fit-up:** Yes No N/A N/A Yes N/A **Approved Drawings:** Yes No **Approved WPS:** No Yes No N/A **Delayed / Cancelled:** 

**Bridge No:** 34-0006 **Component:** Orthotropic Box Girder (OBG)

### **Summary of Items Observed:**

On this date Caltrans OSM Quality Assurance (QA) Inspector, Amit K. Juvekar, was present during the times noted above for observations relative to the work being performed.

Trial assembly yard, 11AE, Light Bracket.

FCAW welding of weld joint LB4A-002-044, 058; located at Trial assembly yard. Welders are identified as 047353, 040367; ZPMC Quality Control Inspector (QC) is identified as An Qing Xiang. The welding variables recorded by Quality Control Inspector (QC) appeared to comply with the Applicable WPS: WPS-B-T-2232-ESAB.

Trial assembly yard, 11AE, Light Bracket.

SMAW welding of weld joint LB4-002-075; located at Trial assembly yard. Welder is identified as 069896; ZPMC Quality Control Inspector (QC) is identified as An Qing Xiang. The welding variables recorded by Quality Control Inspector (QC) appeared to comply with the Applicable WPS: WPS-B-P-2314-TC-P4-F-1.

Trial assembly yard, 11DW, Longitudinal diaphragm to floor beam, PP104, CW side.

SMAW Repair welding (Ultrasonic Inspection repair per ZPMC UT-report # B787-UT-16422) of weld joint SEG071B-043 (WRR # B-WR17161); located at Trial assembly yard. Welder is identified as 046709; ZPMC Quality Control Inspector (QC) is identified as Zhu Zhong Hai. The welding variables recorded by Quality Control Inspector (QC) appeared to comply with the Applicable WPS: WPS-345-SMAW-3G(3F)-FCM-REPAIR-1. The attached photographs provide additional detail.

# WELDING INSPECTION REPORT

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This QA Inspector carried out NDE on following Trail assembly, 11CW-11DW.

This QA Inspector performed verification Ultrasonic Testing (ABF Request No: UT-11W-066R1) in accordance with ABF/CT Pattern "D" UT Procedure 001 Revision 1. All recordable Indications if found were recorded on a separate data sheet that Caltrans QA generates after performing a joint inspection with ABF ultrasonic testing personnel. The location of the inspection was identified as weld between Side panel Bottom panel at the OBG Segment 11CW-11DW. The weld designations were as;

- 1) SEG069A-011. (11CW-11DW, BP-SP-W3);
- 2) SEG071A-043. (11CW-11DW, BP-SP-W3).

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.



## **Summary of Conversations:**

No relevant conversations.

#### **Comments**

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang, 1500.042.2372, who represents the Office of Structural Materials for your project.

| Inspected By: | Juvekar, Amit      | Quality Assurance Inspector |
|---------------|--------------------|-----------------------------|
| Reviewed By:  | Dsouza,Christopher | QA Reviewer                 |